

Title (en)  
DEVICE FOR SYNCHRONISING A DIGITAL RECEIVER

Title (de)  
VORRICHTUNG ZUR SYNCHRONISATION EINES DIGITALEN EMPFÄNGERS

Title (fr)  
DISPOSITIF DE SYNCHRONISATION D'UN RECEPTEUR NUMERIQUE

Publication  
**EP 0893886 B1 20050216 (EN)**

Application  
**EP 96946329 A 19961224**

Priority  
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Abstract (en)  
[origin: EP0893886A1] The invention relates generally to transmission of digitized information and more specifically to a digital receiver locking device that provides a decreased lock-in time and minimizes requirements to a permissible frequency and phase matching error. Outputs of a digital phase detector 1 are coupled, respectively, to an addition input of an analog adder 2 and a first information input of a multiplexer 3 having an output coupled to a subtraction input of the analog adder 2. An output of the adder 2 is connected via a low-pass filter to an input of a voltage controlled oscillator (VCO) 5 having an output connected to a clock input of a decision unit 6 whose information input is coupled, along with a first input of the phase detector 1 and a first input of a lock state detection circuit 7, to an input of the locking device. A second input of the phase detector 1 and a clock input of the decision unit 6 are coupled to an output of the VCO 5. A first output of the lock state detection circuit 7, which is an unlocked state indication output, is coupled to a control input of the multiplexer 3, and a second output of the circuit 7, which is a lock lead/lag indication output, is coupled to a second information input of the multiplexer 3. <IMAGE>

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IPC 8 full level  
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